

62

1959/60

187 HYBRID GUIDE

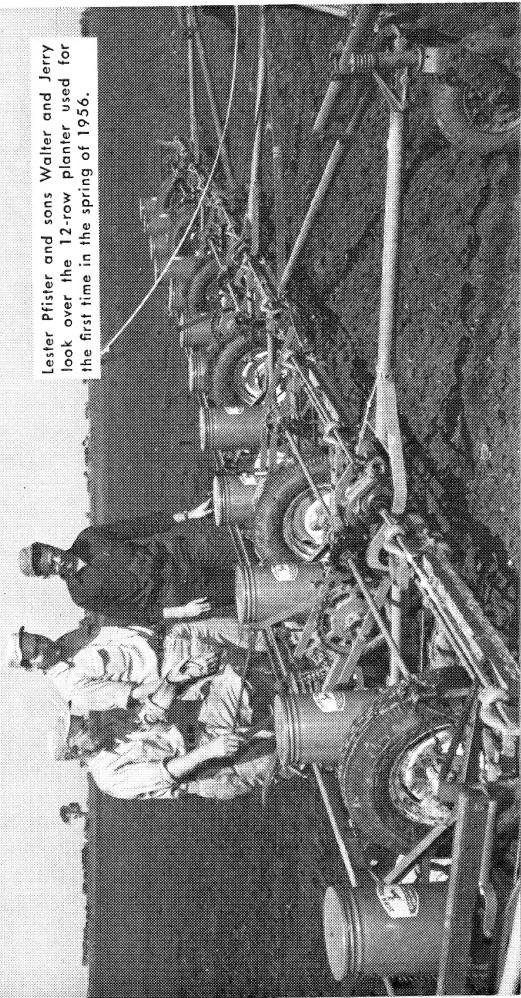


LIBRARY
RECEIVED
★ AUG 14 1959
U. S. Department of Agriculture

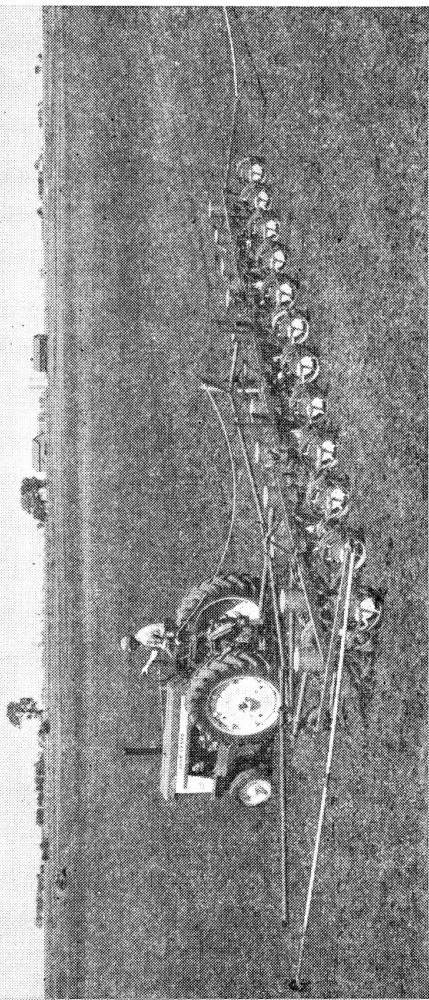
Lester Pfister
El Paso, Ill.



Lester Pfister and sons Walter and Jerry look over the 12-row planter used for the first time in the spring of 1956.



The 12-row planter is now a part of the usual planting operation at Pfisters.



HOW MUCH TO PAY FOR CUSTOM WORK

The figures below are intended to serve only as a guide in figuring costs and in setting rates for custom work.

The figures include a charge for cost of ownership—depreciation, interest on investment, taxes and insurance, and housing. They also include cost of operation—fuel or power, repairs, and lubrication.

The rates are based on work done under normal conditions. Long rows, large fields, or other favorable factors could reduce costs slightly. Small or irregular fields, point rows, soil conditions, and the like could push costs higher.

A charge for labor is NOT included. This varies with local conditions, so add your own figure. Supply and demand may vary the rates, but they serve as a guide.

Farm operation	Suggested charge under normal conditions (labor NOT included)	
	Per hour	Per acre
Tillage:		
Plowing, 2-bottom.....	\$2.50.....	\$2.75
Plowing, 3-bottom.....	3.00.....	2.50
Disk harrow, 15-foot single.....	2.00.....	0.50
Disk harrow, 10-foot tandem....	2.50.....	0.80
Disk harrow, 14-foot tandem....	3.00.....	0.70
Spike-tooth harrow, 22-foot.....	1.80.....	0.25
Spring-tooth harrow, 17-foot....	2.00.....	0.65
Packing, double-gang corrugated roller.....	2.00.....	0.65
Planting:		
Drill, small-grain, 11-foot.....	3.00.....	0.80
Drill, small-grain, 11-foot, with fertilizer attachment and grass seeder.....	4.25.....	1.10
Endgate seeder.....	1.25.....	0.30
Packer seeder.....	2.50.....	0.65
Plant corn, drill, 2-row.....	1.50.....	1.00
Plant corn, drill, 4-row.....	3.00.....	0.90
Plant corn, check, with fertilizer, 2-row.....	1.75.....	1.20

Plant corn, check, with fertilizer, 4-row.....	4.00.....	1.00
Plant corn, check, with fertilizer, 6-row.....	5.00.....	1.00

Cultivation:

Rotary hoe or weeder, 2-row.....	1.80.....	0.50
Rotary hoe or weeder, 4-row.....	2.50.....	0.40
Cultivate, 2-row.....	1.75.....	0.85
Cultivate, 4-row.....	3.00.....	0.70
Cultivate, 6-row.....	4.00.....	0.70
Cultivate and fertilize, 2-row....	2.00.....	1.05
Cultivate and fertilize, 4-row....	3.25.....	0.90

Harvesting:

Corn picking, 2-row.....	6.50.....	3.25
Combining direct or pick-up.....	7.00.....	3.50
Corn combining.....	8.00.....	4.00
Windrowing.....	2.50.....	0.85
Forage harvesting, corn and sorghum.....	6.00.....	6.00
Forage harvesting, grass and legume.....	5.00.....	5.00

Haying:

Mowing or pasture clipping.....	2.25.....	0.75
Raking, side delivery.....	2.50.....	0.80
Baling, field pickup.....	0.11 per bale, not per hour	....
Field chopping.....	6.00.....	....

Fertilizing:

Spread commercial fertilizer, broadcast.....	2.25.....	0.70
Tractor and manure loader.....	2.00.....	....

Spraying:

Sprayer, tractor with attached or trailer-type boom.....	2.00.....
---	-----------	------

Miscellaneous:

Cut cornstalks, 2-row, rotary-type.....	2.50.....	1.20
Saw wood, chain saw.....	2.50.....	....
Tractor only, 2-plow.....	1.25.....	....
Tractor only, 3-plow.....	1.50.....	....
Tractor only, 4-plow.....	1.75.....	....
Shell corn.....	2½c per bushel...	....
Dry shelled corn or small grain..	1c per bushel per per- cent of moisture re- moved; 5c minimum charge per bushel	....

POPULATION PER ACRE

Row Spacing 3'4"

Hill drop	2 per hill	3 per hill	4 per hill
19" spacing	16,504	24,756	33,008
25" spacing	12,544	18,816	25,088
29" spacing	10,814	16,221	21,628
33" spacing	9,502	14,253	19,004
Checked Corn			
3'4" x 3'4"	7,840	11,760	15,680
Drilled corn			
3'4" x	8" 19,600	14" 11,200	18" 8,710

AVERAGE ACRES PER BUSHEL OF SEED
HILL DROP 2 KERNELS PER HILL

Row Spacing 3'4"

	MF	MLF	LF	MT	MLT	MR	MLR
19" spacing	4.59	3.95	3.61	4.24	3.83	4.08	3.65
25" spacing	6.04	5.20	4.76	5.58	5.04	5.37	4.80
29" spacing	7.01	6.04	5.52	6.47	5.85	6.23	5.57
33" spacing	7.98	6.87	6.28	7.37	6.66	7.09	6.34

At 3 per hill reduce acreage by $\frac{1}{4}$

At 4 per hill reduce acreage by $\frac{1}{2}$

AVERAGE ACRES PER BUSHEL OF SEED

Checked at 3'4" x 3'4"

	MF	MLF	LF	MT	MLT	MR	MLR
3 kernels per hill	6.30	5.43	4.97	5.83	5.27	5.61	5.02
4 kernels per hill	4.73	4.08	3.73	4.37	3.95	4.21	3.76

MAKING A YIELD CHECK

Find Ear Corn Yield

First:

Husk and weigh the corn in the number of HILLS as shown on the table for check-rowed corn. If drilled, refer to drilled corn table, and husk and weigh the number of LINEAL FEET as shown. The result in pounds represents the EAR CORN YIELD per acre in bushels at 70 pounds per bushel. Next, correct for shelled corn yield.

Correct for Shelled Corn Yield

Second:

Shell 20 pounds of the ear corn and multiply the shelled corn weight by 5. The result is the shelling percentage. 80% is the standard shelling percentage on the basis of 56 pounds of shelled corn from 70 pounds of ear corn. Multiply the ear corn yield by the percent above or below 80%. ADD this result to the ear corn yield if ABOVE 80% or SUBTRACT if BELOW 80%. The result is the SHELLED CORN YIELD. Next, correct for moisture.

TABLE FOR DRILLED CORN

3 Ft.	3 Ft.-2 In.	3 Ft.-4 In.
207 Ft.	196 Ft.	186 Ft.
5 In.	5 In.	6 In.

(Measure and Husk the number of Lineal Feet as shown in above chart corresponding to the distance between rows.)

TABLE FOR CHECK-ROWED CORN

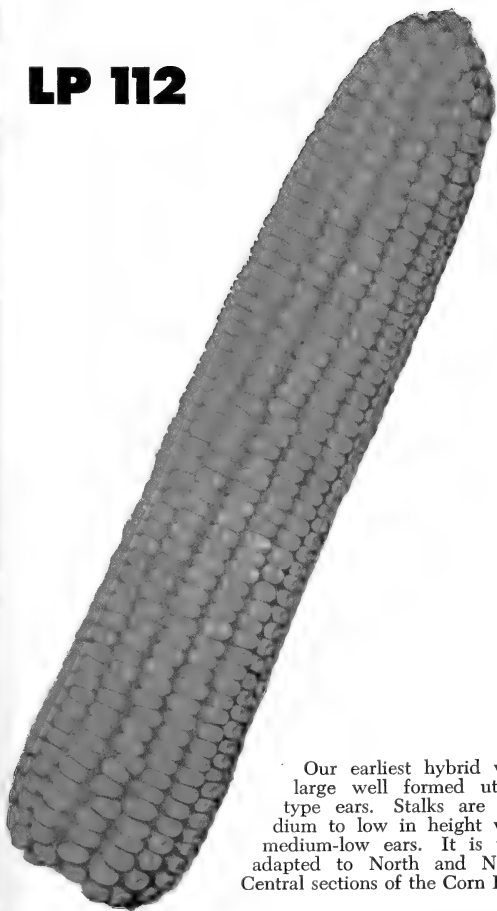
		3 Ft.	3 Ft.
	3 Ft.	2 In.	4 In.
3 Ft., 0 In.....	69.....	65.....	62
3 Ft., 2 In.....	65.....	62.....	59
3 Ft., 4 In.....	62.....	59.....	56
3 Ft., 6 In.....	59.....	56.....	53

(Measure the distance between rows and between hills. Husk the number of hills shown on chart. Example: If corn is planted 3 Ft., 4 In. x 3 Ft., 6 In., husk 53 hills.)






LP 112



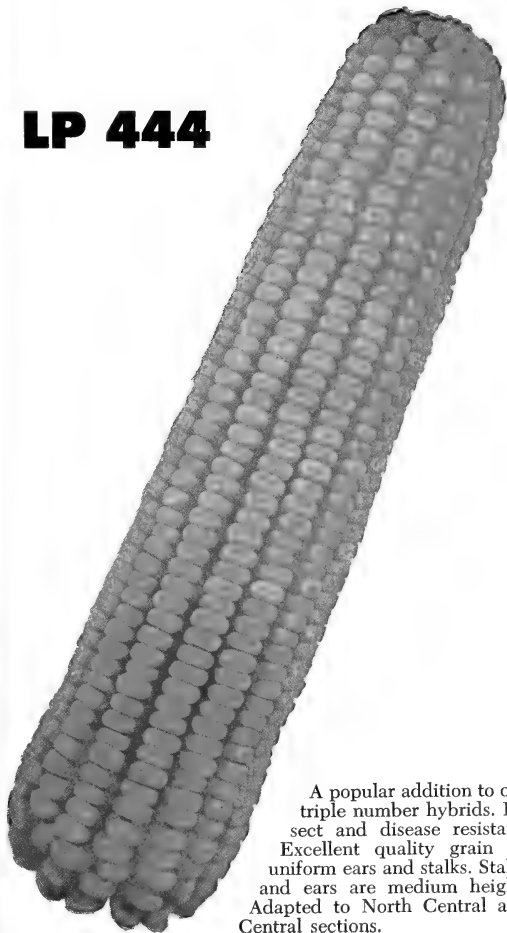
Our earliest hybrid with large well formed utility type ears. Stalks are medium to low in height with medium-low ears. It is well adapted to North and North Central sections of the Corn Belt.

LP 123



Large eared, deep grained, medium height stalks and ears, sparse foliage. Combines high yield and early maturity. Well adapted to feeding. Has wide range of adaptability in the North Central and Central sections.

LP 444

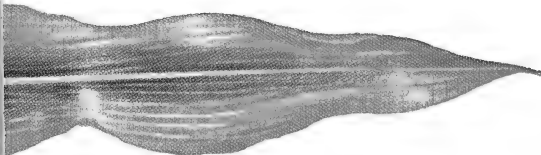


A popular addition to our triple number hybrids. Insect and disease resistant. Excellent quality grain on uniform ears and stalks. Stalks and ears are medium height. Adapted to North Central and Central sections.

BE YOUR OWN



NITROGEN hunger sign is yellowing that starts at tip and moves along middle of leaf.



POTASH deficiency appears as a firing or drying along the tips and edges of lowest leaves.

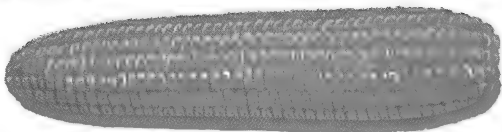


PHOSPHATE shortage marks leaves with reddish-purple, particularly on young plants.

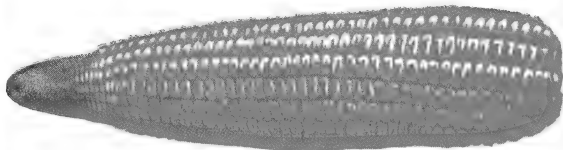


HEALTHY leaves shine with a rich dark green color when adequately fed.

CORN DOCTOR



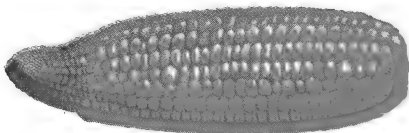
SMALLER THAN NORMAL SIZED EARS usually are a sign of low fertility. For better yields, boost fertilizer application.



POTASH shortage shows up in ears with poorly filled tips and loose chaffy kernels.

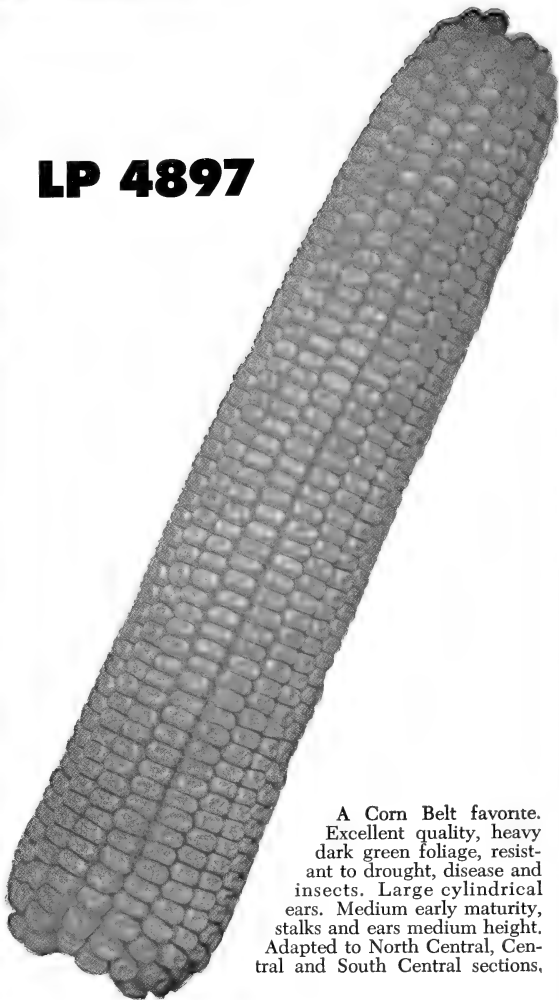


PHOSPHATE shortages interfere with pollination and kernel fill. Ears are small, often are twisted and with undeveloped kernels.



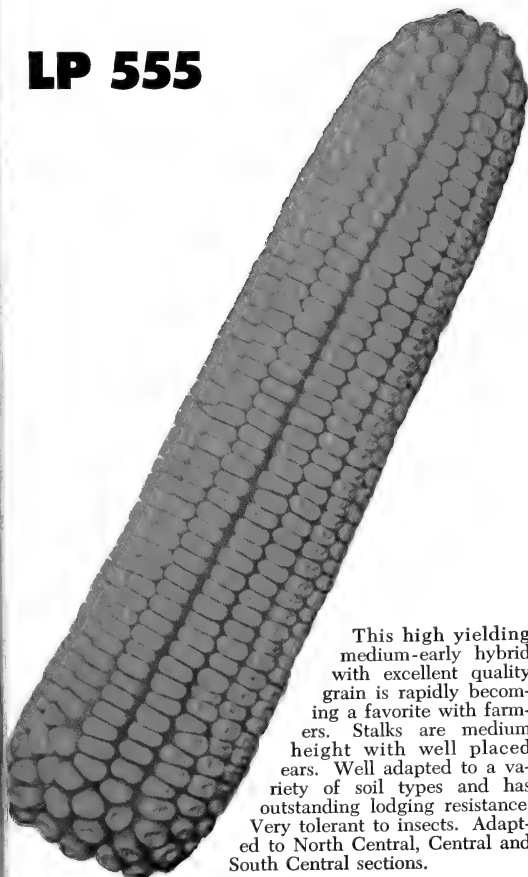
NITROGEN is essential throughout the growing season. If plant runs out of nitrogen at critical time, ears are small and protein content is low. Kernels at tip do not fill.

LP 4897

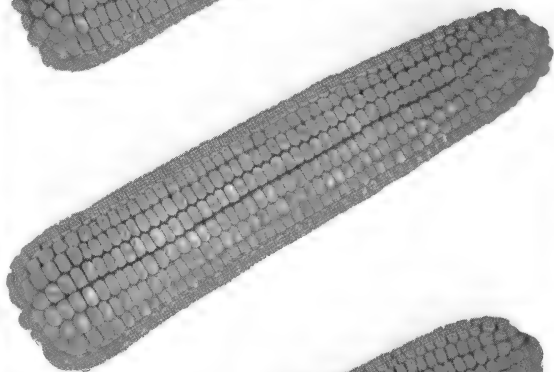
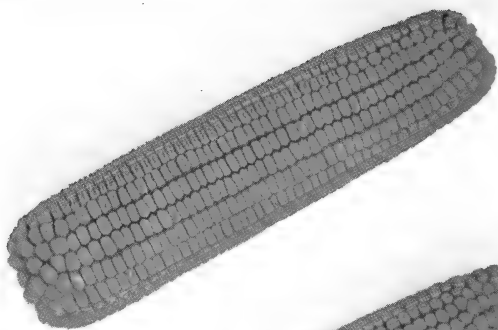


A Corn Belt favorite.
Excellent quality, heavy
dark green foliage, resist-
ant to drought, disease and
insects. Large cylindrical
ears. Medium early maturity,
stalks and ears medium height.
Adapted to North Central, Central
and South Central sections,

LP 555



This high yielding medium-early hybrid with excellent quality grain is rapidly becoming a favorite with farmers. Stalks are medium height with well placed ears. Well adapted to a variety of soil types and has outstanding lodging resistance. Very tolerant to insects. Adapted to North Central, Central and South Central sections.



PURE *Single-Cross* **HYBRIDS**

At the left are representative ears of three of the Lester Pfister pure single cross hybrids that many corn belt farmers have found to be better than the best of the double crosses. The most noteworthy improvements over the double cross hybrids include higher yield, better quality, uniformity, and easier harvesting under all conditions.

187-1 (upper) is an early single cross for the northern area.

187-5 (center) is a medium maturity single cross that is well adapted to central corn belt areas.

187-6 (lower) is a later maturing single cross that is proving quite successful on southern corn belt farms.

Lester Pfister

LP 360-1




An improved 360 with the high yielding ability, shelling percentage and quality of old 360 with lodging resistance that makes it a favorite in the North Central and Central sections.



LP 456

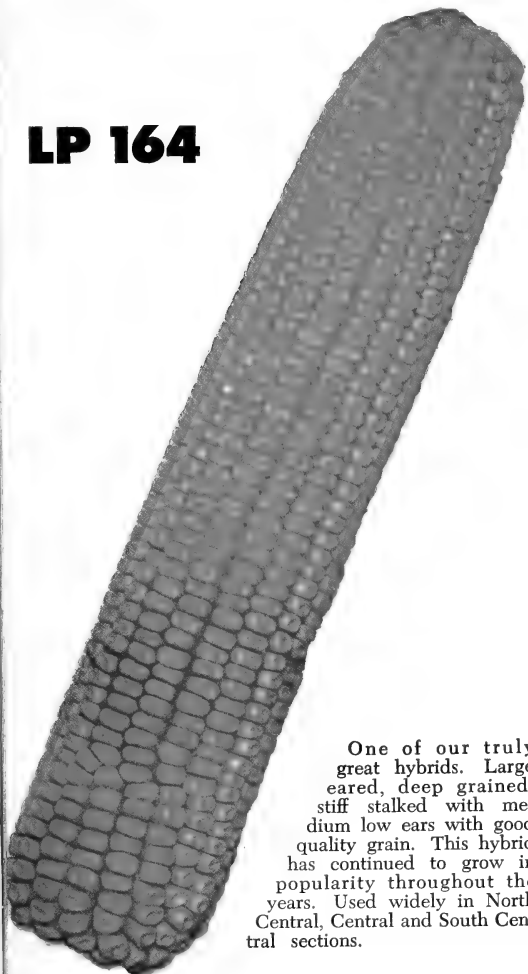
An outstanding hybrid. Combines the desirable characteristics of high yield, quality, adaptability and lodging resistance into one great hybrid. Ears are medium height on stalks, and are large and cylindrical. Well adapted for North Central, Central and South Central sections.

LP 1897



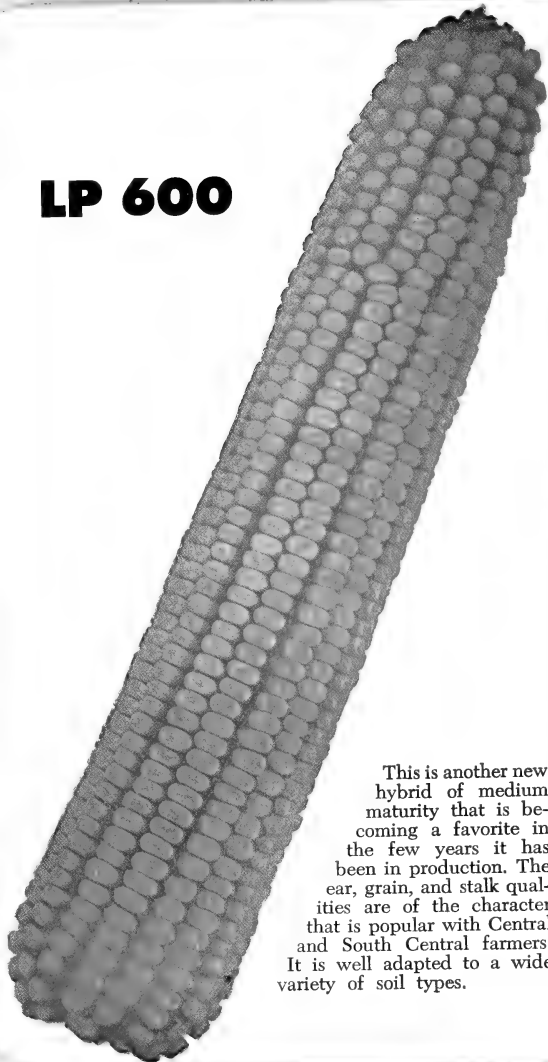
Outstanding ability to adjust itself to variable conditions has made 1897 one of our most dependable and popular hybrids. Large cylindrical ears, deep grains, medium height, stiff stalks, good quality. Adapted to Central, South Central and Southern sections.

LP 164



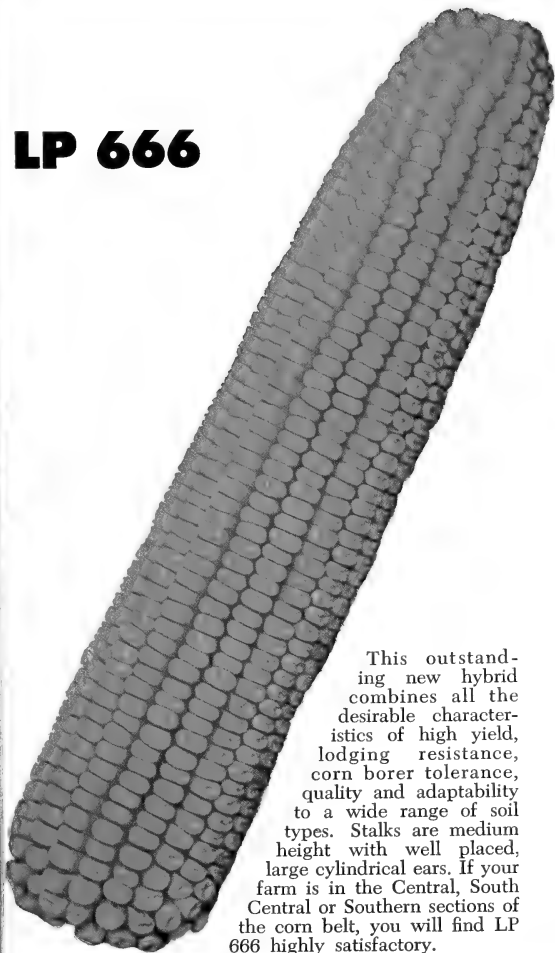
One of our truly great hybrids. Large eared, deep grained, stiff stalked with medium low ears with good quality grain. This hybrid has continued to grow in popularity throughout the years. Used widely in North Central, Central and South Central sections.

LP 600



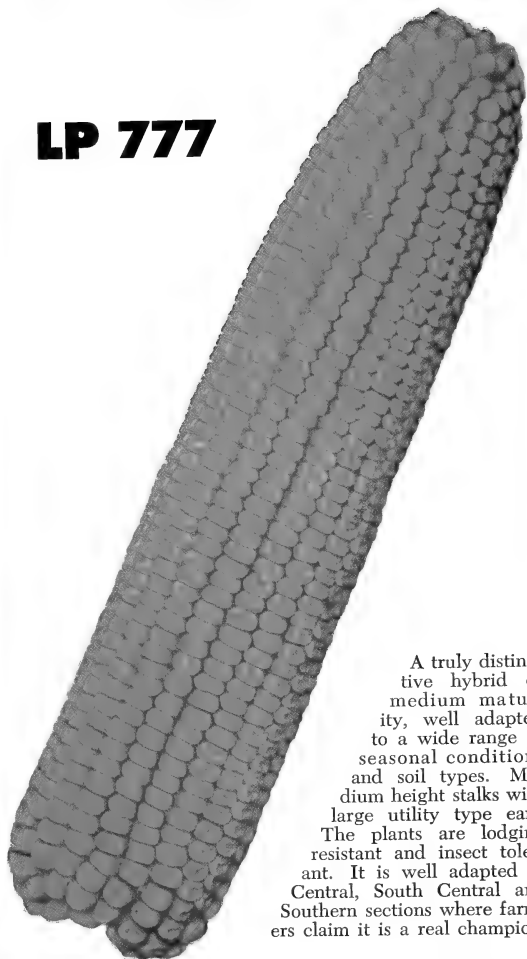
This is another new hybrid of medium maturity that is becoming a favorite in the few years it has been in production. The ear, grain, and stalk qualities are of the character that is popular with Central and South Central farmers. It is well adapted to a wide variety of soil types.

LP 666



This outstanding new hybrid combines all the desirable characteristics of high yield, lodging resistance, corn borer tolerance, quality and adaptability to a wide range of soil types. Stalks are medium height with well placed, large cylindrical ears. If your farm is in the Central, South Central or Southern sections of the corn belt, you will find LP 666 highly satisfactory.

LP 777



A truly distinctive hybrid of medium maturity, well adapted to a wide range of seasonal conditions and soil types. Medium height stalks with large utility type ears. The plants are lodging resistant and insect tolerant. It is well adapted to Central, South Central and Southern sections where farmers claim it is a real champion.





GRADE REQUIREMENTS FOR YELLOW CORN, WHITE CORN AND MIXED CORN

Grade No.	Mini- mum test weight per bushel	Maximum limits of—			
		Mois- ture	Cracked corn and foreign material	Damaged kernels	
				Total	Heat- damaged
	<i>Pounds</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1.....	54	14.0	2	3	0.1
2.....	53	15.5	3	5	.2
3.....	51	17.5	4	7	.5
4.....	48	20.0	5	10	1.0
5.....	44	23.0	7	15	3.0
Sample grade.....	Sample grade shall include corn of the class Yellow Corn, or White Corn, or Mixed Corn, which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive; or which contains stones and/or cinders; or which is musty, or sour, or heating, or hot; or which has any commercially objectionable foreign odor; or which is otherwise of distinctly low quality.				

From U. S. G. S. A. Form No. 90, Revised 1941.

Correct Moisture Content for No. 2 Corn

Take the moisture test of the shelled corn and multiply the shelled corn yield by the percent above or below 15.5%—SUBTRACT this result from the shelled corn yield if ABOVE 15.5% or ADD if BELOW 15.5%. The result is the shelled corn yield per acre corrected to 15.5% or NUMBER 2 CORN.

GENERAL INFORMATION

Dry Measure

2 pints	1 qt.
8 quarts	1 peck
4 pecks	1 bushel

NOTE: A bushel contains 2150.42 cu. in.

Linear Measure

12 inches	1 foot
3 feet	1 yard
5½ yards	1 rod or pole
16½ feet	1 rod or pole
40 rods	1 furlong
8 furlongs	1 statute mile
320 rods	1 mile
5280 feet	1 mile

U.S. Government Land Measure

A township = 36 sections each 1 mile square.

A section = 640 acres.

A quarter section, half a mile square = 160 acres.

An eighth section, half a mile long and a quarter mile wide = 80 acres.

Other Land Measures

10 rods by 16 rods	1 acre
5 rods by 32 rods	1 acre
4 rods by 40 rods	1 acre
5 yards by 968 yards	1 acre
40 yards by 121 yards	1 acre
20 yards by 242 yards	1 acre
220 yards by 198 feet	1 acre
110 feet by 396 feet	1 acre
60 feet by 726 feet	1 acre
300 feet by 145.2 feet	1 acre
4840 square yards	1 acre

Square Measure

144 sq. in.....	1 square foot
9 sq. feet.....	1 square yard
30¼ sq. yds.....	1 square rod
272¼ sq. ft.....	1 square rod
160 sq. rods.....	1 acre
640 acres.....	1 square mile

HOW TO COMPUTE CAPACITY OF CRIBS

Square or Rectangular Cribs

Multiply the length by the width by the depth of grain (all in feet). Multiply this sum by 2 and divide by 5. The result is the number of bushels ear corn at 70 lbs. per bu. Correct for shelling percentage and moisture as directed on preceding pages.

Round Cribs

Multiply the diameter (distance across center) by the diameter. Multiply this sum by the depth (all in feet). Multiply the sum by .315. The result is bushels at 70 lbs. per bu. Correct for moisture and shelling percentages.

Piles of Corn

When heaped in form of a cone: Square the depth and square the inches of slant height (i.e., multiply each by itself). Subtract the lesser of these amounts from the greater. Multiply the difference obtained by the depth in inches. Multiply this product by .0024. The result is the bushels shelled corn at 70 lbs. bu. basis. Correct for moisture and shelling percentage. When corn is heaped against a straight wall divide this result by two.

The above formulas give bushels of 70 lb. basis ear corn. For shelled corn capacities in bushels double number bushels ear corn and correct for moisture content.

1959

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7	..	..	..	1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	..	..	..	..	..	..	..	29	30	31	..	..	..	..	26	27	28	29	30	..	..
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	2	..	1	2	3	4	5	6	..	..	..	1	2	3	4	..	..	..	..	..	..	1
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30	..	..	..	..	26	27	28	29	30	31	..	23	24	25	26	27	28	29
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	3	1	2	3	4	5	6	7	..	..	1	2	3	4	5
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
27	28	29	30	..	..	..	25	26	27	28	29	30	31	29	30	..	..	..	..	..	27	28	29	30	31	..	..

1960

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	2	..	1	2	3	4	5	6	..	..	1	2	3	4	5	..	..	..	..	..	1	2
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19	10	11	12	13	14	15	16
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26	17	18	19	20	21	22	23
24	25	26	27	28	29	30	28	29	..	..	..	..	..	27	28	29	30	31	..	..	24	25	26	27	28	29	30
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	..	1	2	3	4	..	..	..	..	1	2	..	..	1	2	3	4	5	6
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
29	30	31	..	..	..	..	26	27	28	29	30	..	..	24	25	26	27	28	29	30	28	29	30	31	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	2	..	..	..	..	..	..	1	..	..	1	2	3	4	5	..	..	..	..	1	2	3
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
25	26	27	28	29	30	..	23	24	25	26	27	28	29	27	28	29	30	..	..	..	25	26	27	28	29	30	31
..	..	..	..	..	..	..	30	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Maximum hybrid vigor, yield, quality, standability, insect tolerance and drought resistance can be obtained only by crossing two pure, unrelated, adapted inbred lines as a pure single cross.

With recent improvement in inbred lines — plus new and modern production methods — it is now possible and practical to produce this type of hybrid seed in large volume and at a reasonable cost to corn belt farmers.



by *Lester Pfister*

El Paso, Illinois